

Chapter 68

SOIL EROSION AND SEDIMENT CONTROL*

* **Cross References:** Buildings and building regulations, ch. 8; excavations in streets and sidewalks, § 70-41 et seq.

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Sec. 68-1. Definitions.

The following words, terms and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Applicant means any persons, corporation, or public or private organization proposing a development which would involve disturbance to the natural terrain as herein defined.

Cut means an excavation, or the difference between a point on the original ground and a designated point of lower elevation on the final grade; also, the material removed in excavation.

Development project means any construction, demolition, or removal of structures, roadways, parking or other paved areas, utilities, or other similar facilities, including any action requiring a building permit by the city.

Erosion means the removal of mineral and/or organic matter by the action of wind, water, and/or gravity.

Excavate means any act by which earth, sand, gravel, rock, or any other similar material is dug into, cut, quarried, uncovered, removed, displaced, relocated, or bulldozed, and shall include the conditions resulting therefrom.

Fill means any act by which earth, sand, or other material is placed or moved to a new location above ground. The fill is also the difference in elevation between a point of existing undisturbed ground and a designated point of higher elevation of the final grade.

Land disturbing activity means any physical land development activity which includes such actions as clearance of vegetation, moving or filling of land, removal or excavation of soil or mineral resources, or similar

activities.

Runoff means the surface water discharge or rate of discharge of a given watershed after a fall of rain or snow, including seepage flows that do not enter the soil but run off the surface of the land; also, that portion of water that is not absorbed by the soil, but runs off the land surface.

Sediment means solid material, both mineral and/or organic, that is in suspension, is being transported, or has been moved from its site of origin by wind, water and/or gravity as a product of erosion.

Soil erosion and sediment control plan means the approved document required before any person may cause a disturbance to the natural terrain within the city as herein regulated, also herein referred to as the erosion and sediment control plan or approved plan.
(Ord. No. O-94-18, § I(13), 8-9-94)

Cross References: Definitions generally, § 1-2.

Sec. 68-2. Findings; purpose.

(a) The city council hereby finds that excessive quantities of soil are eroding from certain areas that are undergoing development for nonagricultural uses such as housing developments, industrial areas, recreational facilities and roads. This erosion makes necessary costly repairs to gullies, washed-out fills, roads, and embankments. The resulting sediment clogs the storm sewers and road ditches and muddies streams, leaves deposits of silt in ponds and reservoirs and is considered a major water pollutant.

(b) The purpose of this chapter is to prevent soil erosion and sedimentation from occurring as a result of nonagricultural development within the city by requiring proper provisions for water disposal, and the soil surfaces during and after construction, in order to promote the safety, public health, and general welfare of the city.
(Ord. No. O-94-18, § I(1), 8-9-94)

Sec. 68-3. Applicability.

(a) This chapter shall be applicable in any situation involving any disturbance to the natural terrain, topsoil or vegetative ground cover upon any property within the city, except as specified in section 68-4, including but not limited to the following specific situations:

- (1) Any development project subject to the obtaining of a building permit pursuant to the building code.
- (2) Any development project subject to the approval of a subdivision plan pursuant to the subdivision regulations; however, the preliminary and final plats approved by the city planning commission shall constitute the plan.

(b) All plans for projects undertaken by the city through private contractors shall include in the specifications and in the contract documents the requirements of this chapter.

(c) All projects undertaken directly by the department of public works and by its several divisions shall be undertaken in accordance with performance principles provided for in section 68-6(c)(17) and such

standards and definitions as may be adopted to implement said performance principles.
(Ord. No. O-94-18, § I(2), 8-9-94)

Sec. 68-4. Permit required; exceptions.

- (a) It shall be unlawful for any person to disturb any existing vegetation, grades, and contours of land without first applying for and receiving a permit from the building official.
- (b) No permit shall be required under this chapter for the following:
 - (1) The construction, alteration or use of a single-family residential structure or appurtenance or a two-family residential structure or structures accessory thereto, which is or are to be constructed, altered or used individually and not as part of a development, provided such construction, including land disturbing activities, does not occur within 100 feet of any watercourse and has no slopes greater than ten feet vertical in 100 feet horizontal or ten percent, and where, in the opinion of the building official, no soil erosion will occur.
 - (2) Development projects where less than one-half acre is to be disturbed during one planting season, and which disturbance of soil is not within 100 feet of any watercourse, and has no slope greater than ten percent, and where, in the opinion of the building official, no soil erosion will occur.
 - (3) Accepted agricultural management practices such as seasonal tilling and harvest activities associated with property utilized for private and/or commercial agricultural or silvicultural purposes.
 - (4) An excavation which exhibits all of the following characteristics:
 - a. Is less than four feet in vertical depth at its deepest point measured from the average elevation of the natural ground surface;
 - b. Does not result in a total displacement of more than 100 cubic yards of material on any lot, land parcel, or subdivision;
 - c. Has no slopes steeper than ten feet vertical in 100 feet horizontal or approximately ten percent; and
 - d. Has all disturbed surface areas promptly and effectively protected to prevent soil erosion and sedimentation from occurring, including seeding and/or sodding; provided that all disturbed surface areas which will be exposed for a period of time in excess of 30 days shall be covered with a suitable temporary protective ground cover until permanent ground cover is in place.
 - (5) Grading, as a maintenance measure, or for landscaping purposes on existing developed land parcels or lots, provided that all of the following conditions are met:

- a. The aggregate of area(s) affected or stripped at any one time does not exceed 10,000 square feet;
 - b. The change of elevation does not exceed two feet at any point;
 - c. All bare surface area is promptly seeded, sodded, or otherwise effectively protected from erosive actions; and
 - d. The grading does not involve a quantity of material in excess of 500 cubic yards.
- (6) Grading, filling, removal or excavation activities and operations undertaken by the city under the direction and supervision of the director of public works for work on streets, roads or rights-of-way dedicated to public use; provided, however, that adequate and acceptable erosion and sediment controls are incorporated in engineering plans and specifications and employed. Appropriate controls shall apply during construction as well as after completion of such activities.

(Ord. No. O-94-18, § I(3), 8-9-94; Ord. No. O-97-21, § I, 9-8-97)

Sec. 68-5. Plan approval procedure; appeals.

(a) *Plan submission.*

- (1) To obtain approval for a permit under section 68-4, an applicant shall first file an erosion and sediment control plan signed by the owner of the property, or an authorized agent, on which the work subject to approval is to be performed. The plan or drawings, as described in section 68-6, shall include proposed erosion and sediment control measures to be employed by the applicant or his/her agent.
- (2) Where any portion of a proposed development requires approval under the state Freshwater Wetlands Act, G.L. 1956, § 2-1-15 et seq., as amended, and where said approval contains provisions for soil erosion and sediment controls, that approved plan shall be a component of the overall soil erosion and sediment control plan required hereunder for the development.

(b) *Fees.* Where a building permit is required under the building code, the site plans shall include all the requirements of this chapter and the building permit fee shall be based on the entire cost of the building plus improvements required by this chapter. Application of such fees shall apply to all land disturbing activities, for example, subdivisions, except as provided for under section 68-4.

(c) *Plan review.*

- (1) Within five working days of the receipt of a completed plan, the building official shall send a copy of the plan to the public works department, the planning board or the planning department for the purpose of review and comment. The building official may also within the above timeframe submit copies of the plan to other local departments or agencies, including the conservation district that services the county, in order to better achieve the purposes of this chapter.

- (2) The time allowed for plan review shall be commensurate with the proposed development project, and the review shall be done simultaneously with other reviews.
- (d) *Plan approval.*
 - (1) The building official shall take action in writing either approving or disapproving the plan, with reasons stated, within ten days after he/she has received the written opinion of the public works director and the planning director. Failure of the public works director or the planning director to respond within 21 days of the receipt of the plan shall be deemed as no objection to the plan as submitted.
 - (2) In approving a plan, the building official may attach such conditions deemed reasonably necessary by the director of public works and the planning director to further the purposes of this chapter. Such conditions pertaining to erosion and sediment control measures and/or devices may include, but are not limited to, the erection of walls, drains, dams and structures, planting vegetation, trees and shrubs, furnishing necessary easements, and specifying a method of performing various kinds of work, and the sequence or timing thereof. The applicant/owner shall notify the building inspector in advance of his/her intent to begin clearing and construction work described in the erosion and sediment control plan. The applicant shall have the erosion and sediment control plan on the site during grading and construction.
- (e) *Appeals.*
 - (1) *Administrative procedures.*
 - a. If the ruling made by the building official is unsatisfactory to the applicant/owner, the applicant/owner may file a written appeal. The appeal of the plan for a building permit shall be to the building appeals board. The appeal of a plan for a subdivision shall be as provided for in G.L. 1956, § 45-23-14.
 - b. Appeal procedures shall follow current requirements for appeal to either of the two boards above.
 - c. However, under any appeal proceeding, the building official shall notify the conservation commission of the appeal and the time, date, and place of the hearing. The conservation commission shall submit written comments on the appeal, and such comments, together with the written decision of the building official, shall be read into the official record of the hearing.
 - d. During the period in which the request for appeal is filed, and until such time as a final decision is rendered on the appeal, the decision of the building official shall remain in effect.
 - (2) *Expert opinion.* The building inspector, the building appeals board, or the planning board of review may seek technical assistance on any soil erosion and sediment control plan. Such expert

opinion must be made available in the office of the building inspector as a public record prior to the appeals hearing.

(Ord. No. O-94-18, § I(4), 8-9-94)

Sec. 68-6. Plan contents.

(a) The erosion and sediment control plan shall be prepared by a registered engineer or land surveyor on standard 8 1/2-inch by 11-inch, 11-inch by 17-inch, or 24-inch by 36-inch sheets at a suggested scale of one inch equals 40 feet. A key sheet shall be included if a plan consists of more than two sheets. The erosion and sediment control plan shall include sufficient information about the proposed activities and land parcel(s) to form a clear basis for discussion and review and to ensure compliance with all applicable requirements of this chapter.

(b) A minimum of three copies, plus any additional copies that may be required by the building inspector, shall be submitted.

(c) The following information may be drafted on the plans or may be included as attachments, and shall consist of the following:

- (1) Locus plan.
- (2) The name and address of the owner of the site, and, if different, the applicant, the designer, and the developer.
- (3) The location, extent, and type of all proposed work to be performed, including all existing and proposed buildings, structures, utilities, sewers, water mains, and storm drains on the site.
- (4) Topographic mapping with elevations keyed to the municipal base showing existing contours at intervals of not more than two feet and contours at two-foot intervals of the finished grade of all disturbed land area(s) at the conclusion of the construction and/or land disturbing activities.
- (5) A description of the general topographic and soil conditions at the project site, including all significant limitations such as rock outcrops, existing alterations to natural drainage, and any other site characteristics pertinent to the work to be performed.
- (6) The location and size of all parking and loading areas and driveways, both public and private.
- (7) The location of all existing and proposed buildings or structures, utilities, including drainage facilities, and all significant natural features within 100 feet of the proposed work to be performed.
- (8) The name, location, right-of-way width, and pavement width of all streets, roads and highways within 100 feet of the site.
- (9) The location and names, if applicable, of any streams, wetlands, water bodies, drainage swales, watercourses, and areas subject to periodic flooding, both on and within 100 feet of the site on

which the work is to be performed. Included shall be delineation of any areas designated as flood hazards by the Federal Insurance Administration or other state or federal agencies.

- (10) The names and addresses of all owners of abutting parcels and the location of all adjoining lot boundaries according to the latest assessor's records.
- (11) The approximate total quantity of earthwork involved in the proposed work, with appropriate breakdown as to cut and fill.
- (12) The location and extent of the removal of existing topsoil, trees, and other vegetation; and the quantities and location of any material to be removed from the site.
- (13) The estimated time of exposure for all disturbed land area(s) on the site prior to the completion of effective temporary and/or permanent erosion and sediment control measures and facilities. This shall include planting and seeding dates and application rates, and the phasing plan indicating the anticipated starting and completion dates of all phases of proposed site work.
- (14) Details of all proposed drainage provisions to be employed on the site, including the location and type of all proposed erosion and sediment control measures and stormwater runoff controls of both a permanent and temporary nature and specifications for the maintenance of each.
- (15) The type, location, and extent of all proposed temporary and permanent vegetation and mulching that will be used to protect exposed areas of the project site.
- (16) Prompt submittal of such other information or construction plans and details as deemed necessary by the building official or his/her designated agent for a thorough review of the plan prior to action being taken as prescribed in this chapter. Withholding or delay of such information may be reason for the building official to judge the application as incomplete and grounds for disapproval.
- (17) Performance principles.
 - a. The contents of the erosion and sediment control plan shall clearly demonstrate how the principles outlined below have been met in the design and are to be accomplished by the proposed development project:
 1. The site selected shall show due regard for natural drainage characteristics and topography.
 2. Areas with slopes exceeding ten percent shall be avoided.
 3. The grade of slopes created shall be minimized.
 4. When downstream capacities prove to be inadequate, any increase in storm runoff shall be controlled on-site to minimize downstream impact. This increased storm runoff shall be retained and recharged as close as feasible to its place of origin by

means of detention ponds or basins, seepage areas, subsurface drains, porous paving, or a similar technique.

5. Original boundaries, alignment and slope of watercourses within the project locus shall be preserved to the greatest extent feasible.
6. In general, drainage shall be directed away from structures intended for human occupancy or for municipal or utility use, or similar structures.
7. All drainage provisions shall be of such a design and capacity so as to adequately handle stormwater runoff, including runoff from tributary upstream areas which may be outside the locus of the project.
8. Drainage facilities shall be installed as early as feasible during construction, prior to site clearance if possible.
9. Fill located adjacent to watercourses shall be suitably protected from erosion by means of riprap, gabions, retaining walls, vegetative stabilization, or similar measures.
10. Temporary vegetation and/or mulching shall be used to protect bare areas and stockpiles from erosion during construction, the smallest areas feasible shall be exposed at any one time, and disturbed areas shall be protected during the nongrowing months, November through March.
11. Permanent vegetation shall be placed immediately following fine grading.
12. Trees and other existing vegetation shall be retained whenever feasible, and the area beyond the dripline shall be fenced or roped off to protect trees from construction equipment.
13. Areas damaged during construction shall be resodded, reseeded or otherwise restored. Monitoring and maintenance schedules, where required, shall be predetermined.

- b. In order to comply with the principles set forth above, the building official shall use as a reference in determining the suitability and adequacy of erosion and sediment control plans the publication entitled "Rhode Island Erosion and Sediment Control Handbook," U.S. Department of Agriculture, Soil Conservation Service, and Rhode Island State Conservation Committee, 1980, or its most recent edition.

(Ord. No. O-94-18, § I(5), 8-9-94)

Sec. 68-7. Performance bond.

- (a) *Generally.*

- (1) Before approving an erosion and sediment control plan, the building official may require the applicant/owner to file a surety company performance bond or deposit of money or negotiable securities. When any land disturbing activity is to take place within 100 feet of any watercourse or within an identified flood hazard district, or on slopes in excess of ten percent, the filing of a performance bond shall be required. The amount of such bond, as determined by the public works department, shall be sufficient to cover the cost of implementing all erosion and sediment control measures as shown on the plan.
- (2) The bond or negotiable security filed by the applicant shall be subject to approval of the form, content, amount and manner of execution by the public works director and the city solicitor.
- (3) A performance bond for an erosion and sediment control plan for a subdivision may be included in the performance bond of the subdivision. The posting of such bond as part of the subdivision performance bond does not, however, relieve the owner of any requirement(s) of this chapter.

(b) *Notice of default on performance secured by bond.*

- (1) Whenever the building official shall find that a default has occurred in the performance of any term(s) or condition(s) of the bond or in the implementation of measures secured by the bond, written notice thereof shall be made to the applicant and to the surety of the bond by the municipal solicitor. Such notice shall state the nature of default, the work to be done, the estimated cost thereof, and the period of time deemed by the building official to be reasonably necessary for the completion of such work.
- (2) Failure of the applicant to acknowledge and comply with the provisions and deadlines outlined in such notice of default shall mean the institution, by the city solicitor, without further notice of proceedings whatsoever, of appropriate measures to utilize the performance bond to cause the required work to be completed by the city, by contract or by other appropriate means as determined by the city solicitor.

(c) *Notice of default on performance secured by cash or negotiable securities deposit.* If a cash or negotiable securities deposit has been posted by the applicant, the notice and procedure shall be the same as provided for in subsection (b) of this section.

(d) *Release from conditions.* The performance bonding requirement shall remain in full force and effect until satisfactory completion of the work.
(Ord. No. O-94-18, § I(6), 8-9-94)

Sec. 68-8. Expiration of approval.

(a) Every approval granted herein shall expire at the end of the time period set forth in the conditions. The developer shall fully perform and complete all of the work required within the specified time period.

(b) If the developer is unable to complete the work within the designated time period, he/she shall, at least 30 days prior to the expiration date, submit a written request for an extension of time to the building

official, setting forth the reasons underlying the requested time extension. If the extension is warranted, the building official may grant an extension of time up to a maximum of one year from the date of the original deadline. Subsequent extensions under the same conditions may be granted at the discretion of the building official.

(Ord. No. O-94-18, § I(7), 8-9-94)

Sec. 68-9. Maintenance of control devices.

Maintenance of all erosion and sediment control devices under this chapter shall be the responsibility of the owner. Such erosion and sediment control devices shall be maintained in good condition and working order on a continuing basis. Watercourses originating and located completely on private property shall be the responsibility of the owner to their point of open discharge at the property line or at a communal watercourse within the property.

(Ord. No. O-94-18, § I(8), 8-9-94)

Sec. 68-10. Liability of applicant.

Neither approval of an erosion and sediment control plan nor compliance with any condition of this chapter shall relieve the owner/applicant from any responsibility for damage to persons or property, or impose any liability upon the city for damages to persons or property.

(Ord. No. O-94-18, § I(9), 8-9-94)

Sec. 68-11. Inspections.

(a) *Periodic inspections; notice of completion of work.* The provisions of this chapter shall be administered and enforced by the building official or his/her designated representative. All work shall be subject to periodic inspections by the building official or his/her authorized agent(s). All work shall be performed in accordance with an inspection and construction control schedule approved by the building official or his/her designated representative, who shall maintain a permanent file on all of his/her inspections. Upon completion of the work, the developer or owner(s) shall notify the building official that all grading, drainage, erosion and sediment control measures and devices and vegetation and ground cover planting has been completed in conformance with the approval and all attached plans, specifications, conditions, and other applicable provisions of this chapter.

(b) *Final inspection.*

- (1) Upon such notification of completion by the owner, the building official or his/her authorized agent(s) shall make a final inspection of the site in question and shall prepare a final summary inspection report of his/her findings, which shall be retained in the department of inspections and in the department of public works permanent inspections file.
- (2) After the final site inspection has been completed and approved, the applicant/owner may request a release of his/her performance bond by the building official. In the instance where the performance bond has been posted with the recording of a final subdivision, the bond shall be released after the building official has been notified by the city planning director of successful completion of all plat improvements by the applicant/owner.

(Ord. No. O-94-18, § I(10), 8-9-94)

Sec. 68-12. Notice of noncompliance; correction of violations.

If, at any stage, the work in progress and/or completed under the terms of an approved erosion and sediment control plan does not conform to such plan, a written notice from the building official to comply shall be transmitted to the owner. Such notice shall set forth the nature of corrections required and the time limit within which corrections shall be completed. Failure to comply with the required corrections within the specified time limit shall be considered in violation of this chapter, in which case the performance bond or cash or negotiable securities deposit shall be subject to notice of default, in accordance with sections 68-7(b) and (c). (Ord. No. O-94-18, § I(11), 8-9-94)

Sec. 68-13. Penalties.

(a) *Revocation or suspension of approval.* The approval of an erosion and sediment control plan under this chapter may be revoked or suspended and work initiated under the plan halted for an indefinite time period by the building official or his/her authorized agent, after written notification is transmitted to the developer, for one or more of the following reasons:

- (1) Violation of any condition of the approved plan, or conditions or specifications pertaining thereto;
- (2) Violation of any provision of this chapter or any other applicable law, ordinance, rule or regulation related to the work or site of the work; and
- (3) The existence of any condition or the performance of any act constituting or creating a nuisance, hazard, or endangerment of human life or the property of others, or contrary to the spirit or intent of this chapter.

(b) *Other penalties; correction of violations by city.* In addition thereto, whenever there is a failure to comply with the provisions of this chapter, the city shall have the right to notify the applicant/owner that he/she has five days from the receipt of notice to temporarily correct the violations and 30 days from receipt of notice to permanently correct the violations. Should the applicant/owner fail to take the temporary corrective measures within the five-day period and the permanent corrective measures within the 30-day period, the city shall then have the right to take whatever actions it deems necessary to correct the violations and to assert a lien on the subject property in an amount equal to the costs of remedial actions. The imposition of any penalty shall not exempt the offender from compliance with the provisions of this chapter, including revocation of the performance bond or assessment of a lien on the property by the city.

(Ord. No. O-94-18, § I(12), 8-9-94)